Derek Lomas, The Design Lab, University of California, San Diego, USA

In Conversation
India's Design Guru: M.P. Ranjan

> "Design is a very old human capability that has been forgotten by the mainstream educational systems and the traditionalists alike. Both these streams need to reestablish contact with the discipline if we are to face the vagaries of change that is upon us from all directions."
>
> — M.P. Ranjan (2003)

M.P. Ranjan was an influential senior faculty member at India's National Institute of Design and was on the editorial board of this journal. This article shares an interview with M.P. Ranjan that was recorded two days before his untimely death. In it, he shares fascinating and original ideas about the difference between design and engineering, the future of design education and its institutions, as well as multiple approaches for improving design publishing, conferences and pedagogy. M.P. Ranjan's final recorded words are presented here as a message to future designers. (See fig. 1.)

Introduction

Many have recognized the potential value that design and design thinking can bring to rapidly developing countries like India.[1] Every year, there are thousands of places, products, and services built; the promise of "design thinking" is to augment engineering practices with methods and dispositions that ensure that the "right" things are being built.

Therefore, this article seeks to recognize M.P. Ranjan, who has been a leader in promoting design thinking in India (fig. 2). As a faculty at the National Institute of Design (NID), he influenced thousands of students over his 35 years of teaching (figs. 3–7). His sudden death on August 9, 2015 came as a shock to many in the design community in India and around the world. M.P. Ranjan cared deeply for design publication, and thus this interview is submitted with the hope that his words will continue to inspire the next generation of designers and design thinkers.

Brief Biography of M.P. Ranjan

Born in Madras in 1950, M.P. Ranjan joined the NID in 1969, and became a member of its faculty in 1972. He ran the consulting arm of the NID from 1981–1991, during which time he facilitated over 400 collaborative projects between NID faculty and their corporate or government clients. From 1991–1995, he was chair of publications, where he set up a prolific set of design publications. Among students, he was well known for teaching the core design theory course, starting in 1981, which he named "Design Concepts and Concerns" (see figs. 8 and 9). Ranjan was also a prolific writer, publishing in formal publications and via more informal platforms (such as his blog, and the PhD Design List). His two best-known books are his

http://www.journals.elsevier.com/she-ji-the-journal-of-design-economics-and-innovation
http://dx.doi.org/10.1016/j.sheji.2015.11.004

Figure 1 M.P. Ranjan "selfie" with the interviewer, on August 7, 2015. Ranjan had a well-known habit of taking selfies to document his everyday encounters and meetings. Copyright © 2015 M.P. Ranjan.

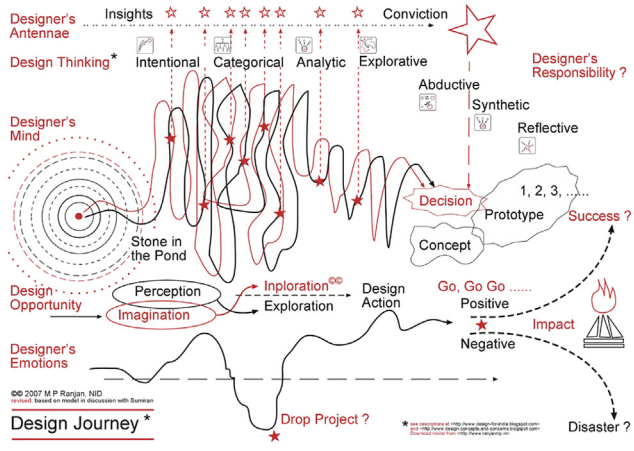


Figure 2 The Design Journey Model. Copyright © 2007 M.P. Ranjan.

encyclopedic documentation of traditional Indian crafts[2] (figs. 10–13) and his book analyzing the cultural and material potential of bamboo[3] (see figs. 14 and 15). When he died, he had just begun to teach a new university-wide course on Design Thinking at Ahmedabad University. His expansive syllabus[4] reflects his deep knowledge of the field of design and his ability to communicate it to students (see figs. 16 and 17).

The Interview

After spending several hours chatting with M.P. Ranjan at the NID campus in Ahmedabad, he graciously offered some time the following day for a recorded phone interview. This interview was part of a design research project examining the nature of design as an academic field. I communicated to Mr. Ranjan that my goals were to create a "map" showing design within the wider university system, and understand where design is going as an independent academic field. While questions were prepared in advance, the interview was largely open-ended and unstructured. In the week that followed, the interview was transcribed using Transcriva, a manual transcription program, then edited for readability and length. The original transcription and audio recordings are available upon request.

To support readers who wish to skim the contents of this interview, the following topics were covered in the following order:

- The future of design in Indian universities
- The difference between engineering and design
- Is design an integrated field of study?
- Identifying "design attitudes" as well as abilities
- The importance of undergraduate "design" majors
- Discussion of the top design schools in India
- Barriers to creating design departments in Indian universities
- The sad state of publications in design
- The importance of design publication
- The need for a national design award
- Discussion of PhD programs in design and design criticism
- "What design faculty must do"
- The need for small design conferences
- Relevant networks of design thinking in India
- A reflection on Don Norman's work
- A personal reflection on 45 years at NID
- The opportunity for documenting design assignments and projects
- The future of entrepreneurship in design education

I'd like to ask you some questions about the field of design in India and where it is going.

M.P. Ranjan: Of course. Recently, the government of India set out to build a new set of NIDs[5] in various parts of the country. For some reason, good or bad, the current NID faculty and alumni have been kept out of it. So, some of us told the government, "This is not the way forward." We put out a call saying that we need vision first. We need to re-envision what shall be the new colleges and the new kinds of programs – and based on that, the government should go ahead and invest monies. We have made it into a movement, so there is a website called www.VisionFirst.in where you can see our arguments.

It became a kind of activist movement: trying to tell government what they need to do going forward.

I can't say we have been successful, but we have managed to prevent what they were contemplating, where each of the new institutes would be given to a new industry partner and they would run the place on a profit-sharing basis, which I thought was a fundamentally flawed approach. So yes, there is a need for new design schools, but what should they teach and what should they do? So, your research could be very valuable for that.

Yes, I'm hoping that the evidence I gather will be useful for policy decisions.

M.P. Ranjan: Certainly. But where does the evidence lie? I believe it lies in the work of the 3200 graduates of the NID and the 815 graduates of IDC (Industrial Design Center). They were the first schools set up in India to look at design, or modern design. As for traditional design, if you take a broader net, there are many, many more schools that were started long before NID and the new design movement had risen.

We have to go back a little bit to understand the context of design in India; just looking at the NIDs and IDC you won't get a complete picture [of] where the capabilities for Indian industries come from, where the capabilities of any form of innovation – it isn't just in the industrial design space, it is also in the branding and communication space and in the textile and production space. There are broadly these areas – and many of the new spaces have been merged. There have existed forerunners in other institutions that need to be mapped out, if you wish to do a thorough job.

Many of the art colleges also spawned design-related disciplines, as did the architecture schools and the engineering schools. So, if you were only to look at the design schools, you would get an incomplete view. Most of the science and technology institutions have had a design component. There have been a lot of innovations that have come out of those institutions that are not mapped and identified as possible foundations for the design platform in India.

In every IIT, for instance, in the area of mechanical engineering, machine tool making, automotive – there has been a lot of design work dealing with engineering solutions. However, this work does not deal with "people-engineering-relationship" type problems, but rather technical issues; they use mathematical modeling and similar tools, with the promise of delivering a better solution to solve very complex problems. And they have been hugely funded.

For instance, India's satellite program has two dimensions: a military dimension, and another

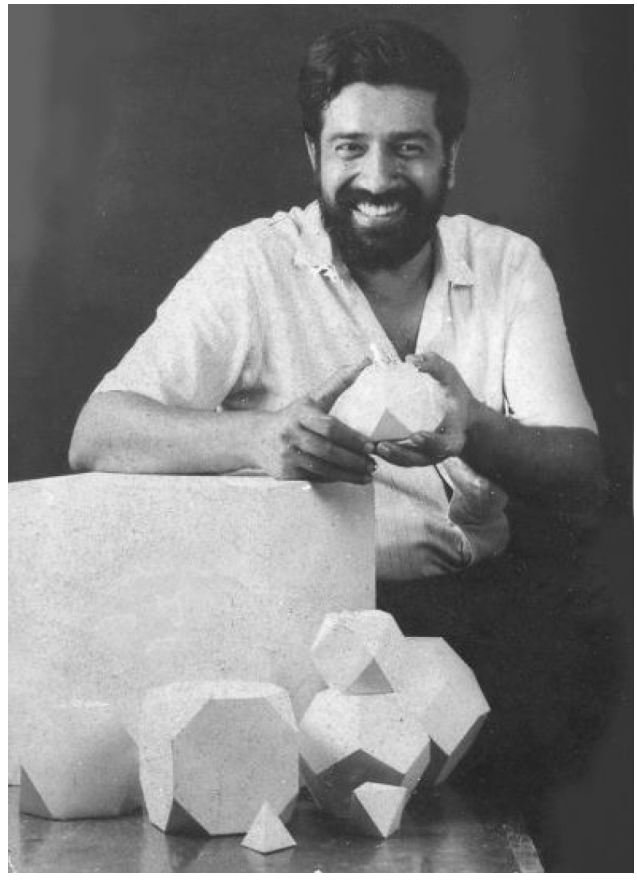


Figure 3 Picture of M.P. Ranjan taken by graphic design student Anjila Puri as a photography assignment developed by Prof. Suranjana Satwalekar (NID). The assignment was to capture the essence of their teaching domain as well as their major passions. Courtesy of Aditi Ranjan.

dimension that involves the promise that our lives will be better thanks to better communication, better access to information, better data on the ground, and a greater degree of visualization, mapping, modeling … and that all this will help in our governance systems.

But the question is: Has it helped, or not? If so, to what extent? These kinds of studies, which are critical studies, just have not been done in my view. And they will need to be done.

How do you see the difference between engineering and design?

M.P. Ranjan: Engineering, in my view, represents the technical competence of both the product and the offering. In design, the intention is not only to make the product better, but in some cases, to replace the product altogether. For the offering may not be a technical solution, it may be a social solution. If the solutions lie outside the engineering realm, engineers will never attempt it. I'm not claiming that designers are doing this, but that is what design is

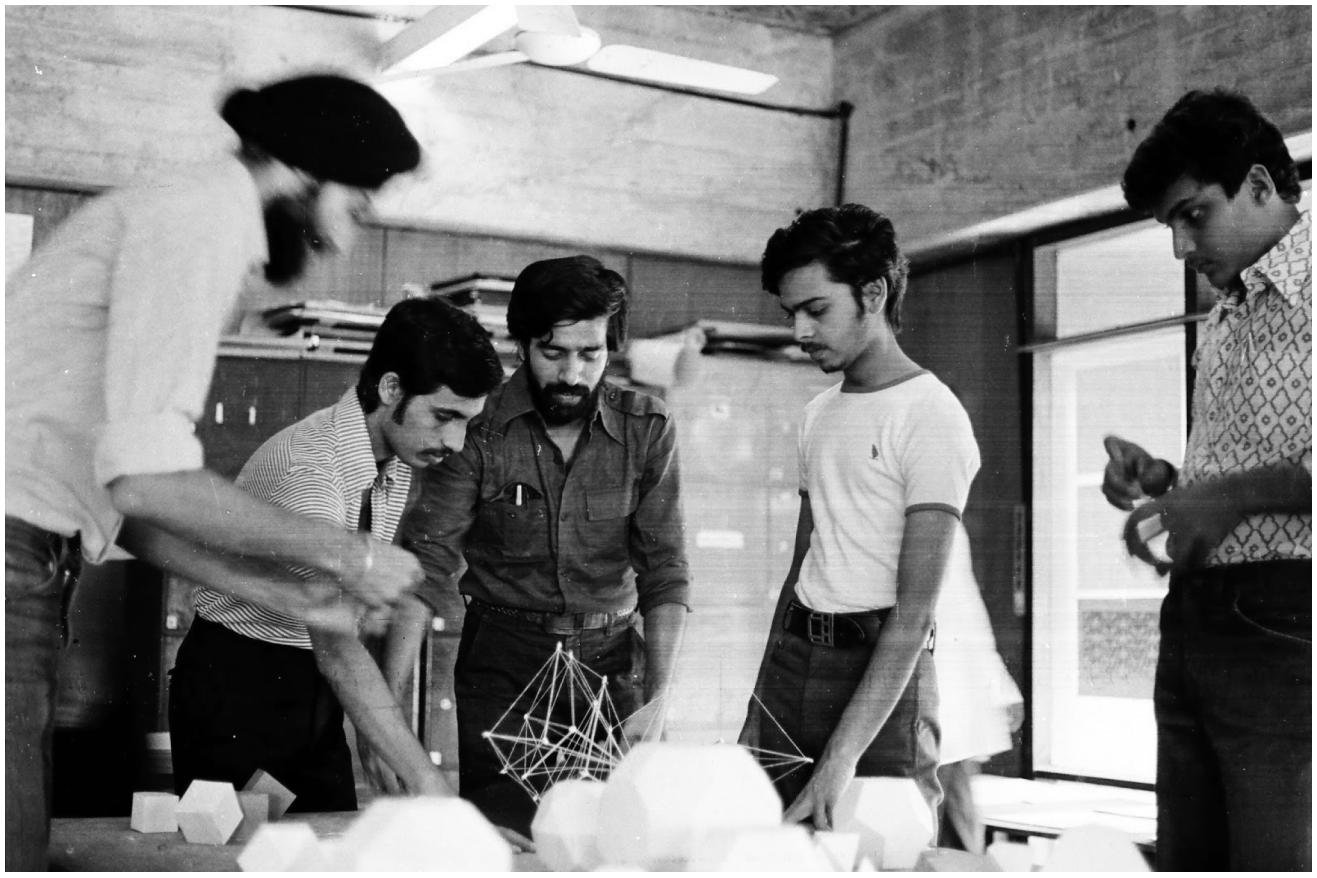


Figure 4 Geometry class in session: M.P. Ranjan with students of the Foundation Program at NID. "Geometrical Construction" and in later years "Geometry and Morphology" was introduced in basic design education by Ranjan to teach "complex structural and formal math and logic problems" to design students. Courtesy of Aditi Ranjan.

Figure 5 M.P. Ranjan with one of his favorite groups: "Design for Change" Jury in 2014. Courtesy of Praveen Nahar.

supposed to do. To be able to assess what needs to be brought to bear on the problem and to realize it.

But even designers don't have the bandwidth to move way outside their own field of expertise to bring in expertise that may be needed to solve some categories of problems. But it is beginning to dawn on us that this capacity is becoming more and more important.

The early goal-setting stages become very critical. Once a goal has been established, we know how to get the hammer and tongs and try to resolve it. But what if the goal is wrong? One goal might be to build a bullet train from Bombay to Ahmedabad. Another is to say that we need improved mobility between these cities, or for the population. So the problem can be defined in a variety of alternate ways. And in alternate definitions, the answer may not involve a train at all!

So, who does this early stage of reckoning? That, I believe, is the domain of design. It is still unacknowledged in our country, and in many other places.

Would you say that design is a collection of independent fields or an integrated field of study?

M.P. Ranjan: Design, in my view, is a set of related abilities and attitudes that need to be developed. For instance, one attitude is when scientists ask for rigor. On the other hand, when you want to explore, you want to play. That is also an attitude. At an early stage, when you don't know where to go, I think play is very good. Now, play seems like a very frivolous way of addressing a very serious problem; but from my experience, many serious problems need playful ways of finding answers. Otherwise, we can remain serious but not get anywhere, because we are still looking within familiar, limited frames. So, changing the frame of reference, that is a big challenge today. And,

Figure 6 Bamboo Boards and Beyond (B3) was a multi-disciplinary international design event inviting students and professionals from all over to participate in a 10 day hands-on workshop at NID in 2000. These images show: M.P. Ranjan discussing product ideas with students in the Wood studio at NID; a product innovation using laminated bamboo board (China) and a board made of woven bamboo (splits) mats (India) in the Wood studio at NID; Furniture Design students holding up their lightweight bamboo space frame in the wood studio at NID; and exhibition of product ideas generated during B3 in the Design Gallery at NID. Courtesy of Aditi Ranjan.

I'm not sure which discipline today is able to suggest alternate frames, other than design. Or, what you might call integrated design.

There are different terms being used today. If you go to Carnegie Mellon, they talk of Transitional Design.[6] They are putting together new courses online; if you haven't seen those, I strongly recommend them … quite a good line of thinking.

Do you think that "design" has potential as an integrated field, or do you think it really makes more sense for design to be treated as a collection of different fields?

M.P. Ranjan: Design skills are important when you are designing. But when you want to talk about design with other people, domain skills are not so important. You need to be convincing, and able to negotiate and build and talk and share and partner with people. So you don't need to draw specifically from domain knowledge, because it exists outside the collaborative field. But you need the ability to connect to that domain knowledge. Do you understand?

If attitudes of co-creation, collaborative working, and team-building are embedded into a person or a small group of people, then chances are that they will be able to mobilize and bring in the required disciplines from outside.

Another essential skill is the capacity to determine that something is even needed. I am talking about truly transformational work where there is no reference point available for you to say, "Should we do this or not?" when getting close to a breakthrough, for instance.

Are these attitudes common across different fields of design?

M.P. Ranjan: What I am trying to say is that the attitude towards these issues, one facet of which is dealing with other people who have expertise, is critical. So, the question is, how does one embed this kind of capability, quality or sensibility in a person? Any design program in the future needs to do that.

This means that one of the most important things programs would want to teach, if this can be taught at all, is the importance of building an ethical standard within the person or group going forward. What I mean by an 'ethical standard' is the ability to honor the other – which is necessary to get that connection. Also, one needs to believe that the other person also knows something, and that there are

Figure 7 M.P. Ranjan with the Katlamara bamboo chair designed by him. Courtesy of Aditi Ranjan.

alternate ways of doing the same thing. One needs to be open enough to look and share. This not like saying, "I know the answer, and I am going to solve it." Sometimes, you truly do not know. In brainstorming we defer judgment for a short time; but in design decision-making, are we able to do this? That is where some design attitudes become very critical.

To be clear: Are you saying that these same attitudes are applicable in all fields of design?

M.P. Ranjan: All fields? You see … there will always be verticals. I don't think there will ever be fewer verticals; instead, there will be more and more. I've been thinking constantly about the 230 sectors of India's economy that need design: they are broad sectors, each of which needs a variety of design types, and design thinking at the leading edge to try to define what could and should be done. They also need design to figure out how best to achieve those things, at what cost, what efficiencies can be built in, and so on. A body of design experience needs to be built up in every single one of those domains.

So, obviously, there will be some differences in attitude and aptitude. For instance, somebody working in banking and finance will accumulate a lot of resources and insight applicable in that domain; that same person could contribute to another sector altogether as a partner. So a variety of different types of design might work in a particular domain – but at the same time, there will be crossover, and cross-disciplinary or transdisciplinary model building.

Perhaps the future university system will have to address both of these needs. How? We will figure out a way … we have to. There are some underlying principles that are definitely within the remit of design. Design itself is built from the gathering together and mastering of a host of disciplines: it borrows from art, technology, the sciences – methodologies, tools, attitudes, processes, approaches – everything! But again, within design, when trying to integrate, it will be necessary to look at what and how these are actually helping us.

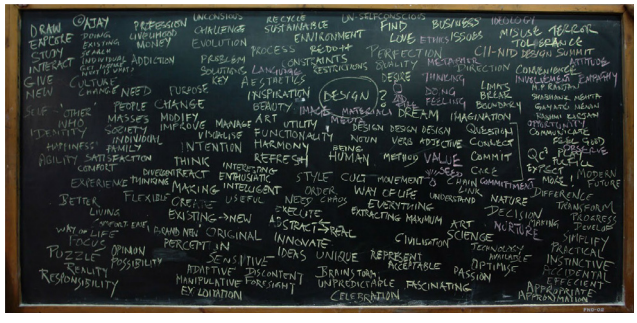


Figure 8 Design Concepts and Concerns (DCC) course: Blackboard generated through class brainstorming on the key words associated with "What is Design?" Courtesy of Aditi Ranjan.

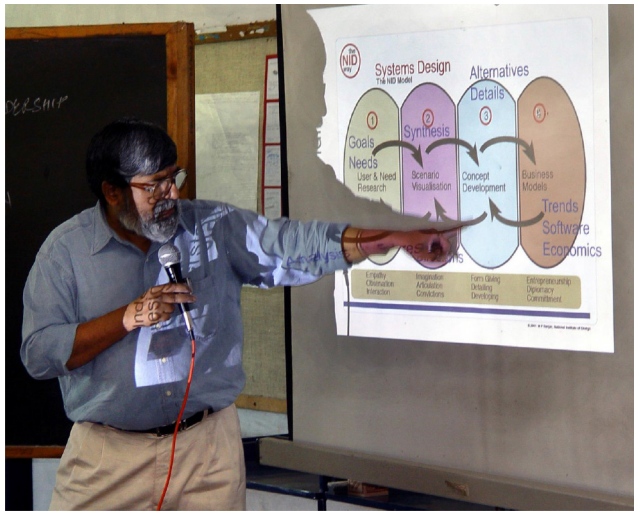


Figure 9 M.P. Ranjan reflected on the DCC course, 2012. Courtesy of Praveen Nahar.

I don't think a serious review has taken place, with very few exceptions. Of the published resources, there are big gaps in knowing what design could be and what is actually needed. Largely, there has been a focus on the aesthetic dimensions of design. And, in recent times, there has been a serious focus on systems design. But that leaves a lot of unanswered questions that need to be discovered or organized. I don't think a typical engineer has any inkling of what design is, or what it could offer. Or, if so, the ideas would be quite superficial, and largely aesthetic, or associated to stories available in mass media.

Are there undergraduate design majors in other schools? Can one get an undergraduate degree in design?

M.P. Ranjan: Yes, there are several schools now offering this within universities. Now, the claim is that the master's degree is superior to the undergraduate: I think this is completely fallacious. It is completely ungrounded. I have always been at NID, and the IIT/IDC faculty is claiming that the master's program is better. My argument has been that the master's program takes people from the fields of engineering, the sciences, some from architecture, and reorients them to design within a one-point-five or two-year program – which is an inadequate amount of time. It lacks the rigor to actually make them cross over to becoming designers, or design theoreticians. Although they have begun the journey toward design, they have not yet arrived.

When you follow their careers over the past 25 years, as I have, you will see that some of them have made the grade, while others haven't. They have become better administrators of design, but they have not really furthered the field of design. This is a very political statement, because we are really comparing two institutions and two approaches. NID is now producing more students in the so-called master's program, which is actually their first degree in design. So NID takes a raw engineer who has absolutely no idea what design could be, and then puts them through a program within a very rich environment, and after two years expects them to understand design, which I think is wrong. It is their first degree in design.

By contrast, although design undergraduates are not exceedingly articulate and well read at the end of five years' training, they have an understanding of design that seems to be far richer. And when you look at the same people five years down the line, you find global leaders in their domains. How did they get

there? Not by virtue of their degree. It was something else. What is that something else? That is a research question that I've been asking somebody to do follow-up research on.

The list of NID graduates from the past 60 years totals 3200 people, and the list of IDC graduates from the past 45 years totals 820 people, and even if graduates from Srishti and other schools were added to these numbers, the total number of design graduates in India from 1970 to today would still be small. It would be easy to ascertain what they have been doing, plot their professional trajectories and determine their current statuses, and then do the metrics to see what correlates back to their education. It has never been done. I have been asking both the government and the institutions to do it, but the project needs funding and brainpower: people who are capable of gathering and analyzing the data, and coming back to give us a categorical perspective, and say, "Yes, there seems to be something of value in our undergraduates."

What other design schools in India are leading the way?

M.P. Ranjan: Srishti is a good place to look. In my view, Srishti is showing signs of excellence that you can't find anywhere else in the country. They are going all the way now, because they are offering a PhD program. Another school is ISDI Indian School of Design and Innovation, which is located in central Bombay. They are new – they haven't graduated their first undergraduate class yet, but they also have a multi-layer approach for interaction design and offer a short-term program for people from industry.

The other program is Pearl Academy; they used to be called the Pearl Academy of Fashion and Technology, but they are realigning themselves towards design. In fact, they have five campuses now, each offering multiple programs with over 300 faculty members. They have been acquired by the American group, Laureate, which has also bought Domus academy and other schools in Europe.

What are some of the barriers to establishing a department of design within a typical Indian university?

M.P. Ranjan: Have you seen the "Design Manifesto"?[7] It was put together by an IIT team, under pressure from the Indian Ministry of Human Resources. It was written to help establish design within all the technological institutions of India.

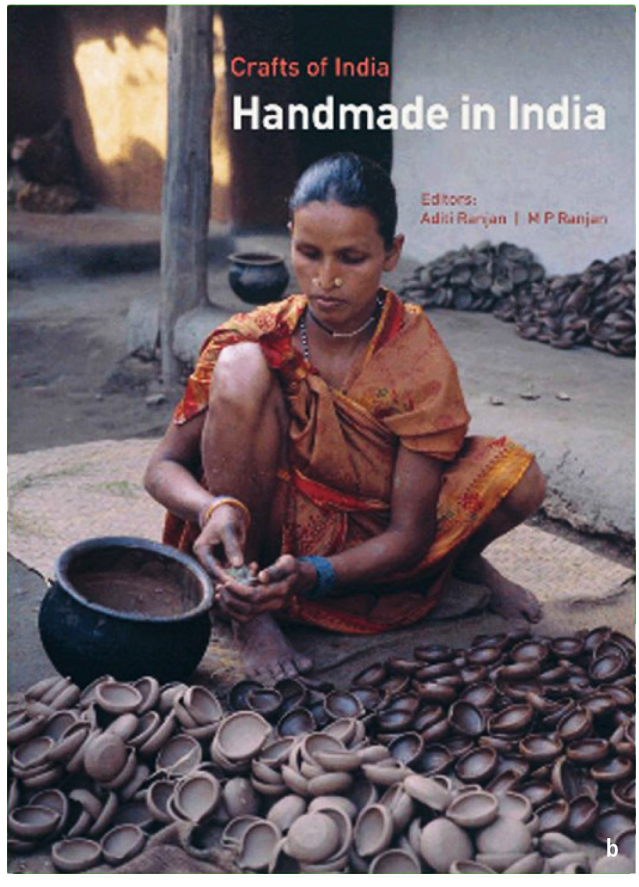


Figure 10a Aditi Ranjan and M.P. Ranjan at the Art Book Centre signing event on Sunday November 2, 2008. Copyright © 2008 M.P. Ranjan.

Figure 10b. Cover of the book: *Crafts in India: Handmade in India*. Copyright © 2008 M.P. Ranjan.

A lot of these institutions make big promises but do not always deliver on the ground. This phenomenon has become apparent because people on the design side are actually showing results without much money. So people were beginning to ask questions like, "Why don't you use design?" which is how the Design Manifesto came into being.

verandahs and the response was the unique form of settlement types found in Goa, Pondicherry, coastal Kerala and Tamil Nadu.

Terracotta vessel, patachitra painted, Parla Khemundi, Orissa.

The craft landscape is made up of numerous types of applications: from the vernacular objects of daily use that are rough-hewn from local materials to the celebrated objects of symbolic value that are used on special occasions and for religious functions. In some cases the same object may be used in different settings but in each case the value assigned to the object is substantially different. The lota, or brass container for liquids, is one such multi-purpose and multivalent object that can be at home in the kitchen, the bathroom and the prayer room and in each case be held in a different spiritual or physical plane, each reflecting the state of the object in the particular context. Objects are thus imbued with value and spirit, which are respected by all users in that society. New categories have emerged that respond to trade and professional needs of the craftsmen and now designers have joined hands to create new objects for new markets that provide economic value to the community of makers and satisfaction to a whole new community of users, some in distant lands. The commercial and the spiritual are both crafted with great pride and care by sensitive hands that use centuries of tradition to inform current practice.

The forms and treatment of objects of everyday use differ widely from objects of celebration or worship. While the one is almost devoid of any ornamentation, it should not be seen as less cared for or less venerated. The observation of the process of making and of its use in the household setting as well as closer examination of the object will reveal the subtle lines that have been left to stand as testimony of the process or the marks of the tool, none of which may be considered functionally necessary. The sanabul from Manipur and the terracotta pots from many parts of India deliberately bear the mark of the hands and tools as signs of process. These marks have subtle meaning: as a means of expression, as an interplay of structure with form, and material with process, and of the culture with the process of signification. The gradient of elaboration is incremental: from the plain and honest craftsmanship to many degrees of elaboration of both form and surface decoration that attempts to elevate the object from mere functionality to a higher status.

The range and manner of using materials reflect the enormous ingenuity of the local mind in discovering appropriate applications. Some are processed through many iterations while others are used raw, in response to an immediate need. Bamboo culm cut off with a sharp blade is an instant container to store water or cook rice, and banana leaf plates are cut, trimmed or stitched to form disposable biodegradable containers. The same bamboo may be processed through many stages of splitting and weaving to produce a dowry gift fit for a queen in Nagaland and the leaf too may be processed into a durable fibre that is crafted into bags or pouches for storing valuables. Thus the materials and techniques respond to a variety of needs, some immediate and of less value while some may be of great value involving either elaborate processing or the spiritual upliftment through the production of myths and votive meaning in response to particular contexts. The range of materials is matched by a bewildering array of fine tools, many fashioned with great care and knowledge by the craftspersons themselves, imbibed through many years of evolutionary community learning called traditional wisdom. Tools and processes are diverse to include earth, water, fire and air, elements that transform materials in many ways, each extracted from a pool of knowledge that is fast disappearing with the so-called advance of modernity. Traditional wisdom needs preservation and needs to be nurtured and used to unfold new values in a contemporary setting. Each culture has much to offer and India is full of such precious nuggets of traditional wisdom that can be applied to local uses or even global exchange.

Indian handicrafts are a storehouse of classical motifs and patterns that have evolved over centuries, many of which have been passed on from trading cultures over eons of interaction. The motifs and patterns once absorbed by a culture get disseminated across a variety of media, from stone to wood, to metal to cloth; from weaving to print and from painting to inlay; each technique bringing to the pattern its unique signature, an amalgam of material and tool limitation. The floral motifs and the creeper, the bel, can find as many expressions as there are materials and contexts to be served as witnessed in the huge variety in the expression of popular motifs such as the keri or aam, the stylized mango, depending on the language that it is being expressed in. The human form too has been depicted in great variety. The upright man or woman has been represented in a host of actions. The rough and ready whittled shapes of the Naga warrior contrast strongly with the elegant statuettes of the Chola bronzes while the wrought iron tribesman from Chhattisgarh differs from the expressive occupational toys from Kondapalli in Andhra Pradesh. Moreover, when a human form enters the sanctum of the temple it takes on a whole new sacred meaning and significance.

Several crafts are a form of pure service and the craftsman plays the role of facilitator of some critical function of form giving or repair. The mochi or cobbler and the potter, the tile maker and the carpenter fall into the category of those who work to serve the community with their skills and knowledge. In the age of mass consumption, it may be a good idea to bring back some of the values of this service to ensure that our products are recycled and repaired rather than used and thrown away long before their active life is over. Craft and the use of craftsmanship could bring in new values for a sustainable future and a new attitude towards the proper use and abuse of materials in the coming years.

Craft objects come in a vast array of product categories, each in tune with its purpose. The selection of wood for the keel of a boat or for the main post of a small local dwelling would show a deep understanding of material properties and the shapes that are found in nature, the wood being appropriately bent or with that presence of a branch fork to support the beams in each case of application. The products would range from the production of miniature animals and dolls for play to animal harnesses and objects for functional use in daily life. Yet other categories are the gifts for numerous occasions such as festivals and marriages as well as religious offerings at the temple or for honouring a leader in the community or to celebrate the arrival of a child. These objects carry signs of their purpose and are specially treated for the particular occasion. Containers, baskets, tools, implements, domestic products and objects of agricultural use represent great concern for efficiency and convenience while objects of celebration have a vast repertoire of decorative processes to make the offering visibly valuable.

Just as there are categories of objects, we find categories of craftspersons and many levels of craftsmanship. In the Northeast where local materials are transformed on a daily basis in the service of day-to-day life, bamboo is fashioned into a variety of baskets and objects. Most of the population is familiar with the craft process and the people exhibit a very high degree of creativity in their ability to transform materials. This is not to say that professional craftspersons do not exist in these regions. They do and they are involved in the making of many specialized products that are traded through the local bazaars. Other members of the craft economy of village and urban India include the small and large entrepreneurs. They keep the wheels of trade in continuous motion and the more ambitious ones, such as the exporters, help build bridges between distant lands and cultures. From time immemorial these itinerant traders have given an extended life to Indian handicrafts by making them available in distant lands through establishing active trade routes.

Dowry basket, palm leaf and plastic strips, Ramanathapuram, Tamil Nadu.

Traditional and modern settings exist for showcasing the craft heritage across India. The bazaar is the closest to the maker while new forms of exhibitions and trade fairs promoted by the government and non-governmental bodies represent the new formats for contemporary action. Religious festivals and regional events or seasonal festivities encourage trade in hand-crafted objects from far and near. The annual Jagannath festival in Puri, Orissa, sees a plethora of stone and wood carvings, cloth paintings and appliqué work for pilgrims to the temple; and the enormous cattle fair at Pushkar, Rajasthan, floods the township with local crafts. This is now becoming a valuable source of heritage tourism.

The craft heritage continues to evolve in modern times and the objects too are finding new and contemporary expression while the old and the traditional is still valued for the refinement that they represent. That the crafts understand and respond to the variety demanded by its clientele can be seen in the profusion of jewellery, clothing, footwear and hand held accessories that are used as part of our daily costume. The great variety and styles of surface and structural treatment

Hand formed terracotta, Thongjao, Manipur.

Thrown and painted ceremonial terracotta, Darbhanga, Bihar.

Brass sheet formed pot used by ascetics, Ahmedabad, Gujarat.

Heat flattened bamboo cheese container, Bomdila, Arunachal Pradesh.

Turned wood bowls for Jain monks, Pipad, Rajasthan.

Moulded and painted papier-mâché, Srinagar, Jammu & Kashmir.

Turned and polished agate bowl, Khambhat, Gujarat.

Moonj grass basket for storing valuables, coiling technique, Allahabad, Uttar Pradesh.

Bamboo basketry, Garo hills, Meghalaya.

Silver with bronze, embossed and engraved sheet formed box, Kalimpong, West Bengal.

show a creative ability of the craftsman to respond to a human need for identity and differentiation. The Kolhapuri chappal, leather footwear, is one such product that comes to mind where with just one material, leather, a great many structural and formal variations are achieved by the use of simple and complex methods of assembly, all satisfying an appreciative but demanding user. Each region responds with its own offering of variety within a functional category as seen in the diversity of baskets from bamboo in the northeast of India and in the vast range of palm leaf constructions from coastal Tamil Nadu and Orissa.

Even today there are places in India where almost everyone is still a craftsperson, able to transform material to fashion expressions of creativity. Tamil women use the art of kolam as a daily ritual of cleaning and decorating the entrance to their home while in much of rural India the houses are surfaced regularly with a coat of wet mud and cowdung that leaves gentle marks of the hand as it sweeps the surface. Wall paintings and decorations are an everyday art in many parts of the country and each uses fascinating local variants to tell stories or to capture symbols of fertility and good will. The Warli and Madhubani painting are two prominent examples of everyday art that is part of the living culture of the land.

India is still creative in its villages, with the young exposed to the art of making and transforming materials and spaces by the act of creation on a daily basis. The living crafts in the rural hinterlands have been contributing enormously. Unfortunately our formal education systems lack the richness of craft experiences with the emphasis on textual and numerical education systems. It is here that crafts hold real promise for the rediscovery of the therapeutic qualities of craftsmanship that can be appreciated and adopted by the entire population. Craftsmanship brings with it an understanding of quality and refinement, and the sensitivity that is gained through this work culture will help introduce our youth to a whole philosophy of values that crafts embody. We will need to transcend the caste barriers that have brought artificial divisions between thinking, writing and doing. Therefore crafts in education will introduce a new dimension. We hope that this book and its companion volumes will help sensitize and shape the character of our youth, through an immersion in the act of craftsmanship.

Crafts are an effective vehicle for self-development and for sustainable employment generation for much of our population living in difficult economic conditions. In the search for development strategies of our rural and urban centres through employment, the government has used crafts with great effect over the past 50 years. The setting up of the Handloom and Handicrafts Boards and the establishment of the Office of the Development Commissioner of Handicrafts has created the avenue through which the support of the government intention can reach all corners of the country in an effective manner. The support in training and in providing seed capital to help establish numerous local entrepreneurs in the crafts sector has been a full time task, which has met with great success. The thriving export climate for handcrafted goods from India is a confirmation of the success of these initiatives.

Government policies over the years have helped support a vibrant local and export industry, an enormous employment base. The scope for entrepreneurship and wealth generation across 516 production clusters are graphically mapped in this volume. Each metacluster has local issues that are addressed by the state in which they are located and each has produced their champions either as local NGO's (non-governmental organizations) or state-supported systems that are easy to access. Many local bodies and cooperatives are supported by the policy regime and a network of agencies is strengthening this through support schemes that reach those who need it most.

Numerous promotional schemes and policy initiatives have been taken by the agencies of the Government of India and of the various state governments. Over the years, these have had a salutary impact on the performance of the crafts sector as a whole and in many remote and inaccessible places these have been the only form of sustained support.

The national and regional programmes of recognition of excellence have identified a very large number of craftspersons and craft promotion agencies that have demonstrated high levels of quality and service. The national Master Craftsman award is coveted by many craftspersons and those recognized by the award join the roster of celebrated individuals who act as role models for the community and foster the pursuit of excellence. Recently the government has instituted the Shilp Guru awards, which are given to master teachers who are empowered and encouraged to pass on their skills and knowledge to other young and potential candidates from their field of work. Such initiatives create new ways for the dissemination of craft knowledge accessible traditionally only to family members.

Many craftspersons are professionals and belong to traditions that had the advantage of early market orientation. In their work is visible a classical order and expression that has been cultivated and well-honed. Equally important is the spontaneous and exuberant expression of the 'amateur' craftsperson whose clay and papier-mâché toys are a delight. Their entry into the market is a new experience that can give them cultural empowerment. Throughout our history, crafts were customized to the needs of the local and distant client. There was a close interaction between the maker, the object and the client or user. Difficult and inhospitable terrains taught the craftsperson to be resourceful, respect scarcity and the resulting economy of material and form rely on ingenuity. Local materials were celebrated. Trade routes and cultural exchanges added new layers to this understanding and sensibility. Transmission of skills from father to son and mother to daughter were apprenticeship based. As rites of passage their fulfillment was synonymous with learning 'life skills'. In the changing contexts of a global market-driven economy and ideology, traditional crafts offer sustainable practices that need to be revisited and imbibed. Craft development needs a paradigm shift from promoting the karigar, traditional craftsperson, to karigari, quality of craftsmanship, since whoever imbibes this quality becomes the craftsperson in perpetuity.

Aditi Ranjan & M P Ranjan
Editors
Ahmedabad

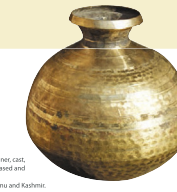
Brass, heat forged serving vessel, Jhajpur, Orissa.

Bell metal casting, ritual vessel, Imphal, Manipur.

Brass cooking utensil, sheet formed with cast handles, Dhenkanal, Orissa.

Copper spitoon, sheet formed and embossed, Ahmedabad, Gujarat.

Copper container, cast, embossed, chased and pierced work, Srinagar, Jammu and Kashmir.



Brass sheet formed water pot, Dhenkanal, Orissa.

Dhokra, lost wax casting, grain measure, Ranchi, Jharkhand.

Bell metal casting, ritual vessel, Jhajpur, Orissa.

Bell metal cast charaiku, large cooking vessel, Thiruvananthapuram, Kerala.

Bidri wash basin, copper and zinc alloy with silver inlay, Hyderabad, Andhra Pradesh.

Bell metal casting, serving vessel, Patrapur, Orissa.

Figure 13 A double spread from the book *Handmade in India*. The craft resource book maps the skills, materials, craftsmanship in a cultural, historical and geographic context. Copyright © 2008 M.P. Ranjan.

Previous Page

Figure 11 Facing pages from *Handmade in India*: *An Encyclopedia of the Crafts of India*, edited by Aditi Ranjan & M.P. Ranjan. A resource for the creative economy of India. Courtesy of Aditi Ranjan.

Figure 12 A double spread from the book *Handmade in India* which illustrates diversity in crafts as a response of different cultures, regions, functions, construction techniques, and forms using one material—metal. Courtesy of Aditi Ranjan.

But this will continue to be a political issue, and there is tremendous resistance to that within the engineering colleges. Many architecture and engineering colleges claim that they already know design, that they are already doing it. By this they mean that they are designing jet airplanes, hardware, technology … but what they call "design" isn't really "end-to-end design," which considers complex social-technological-political-economic issues.

That is a paradigm around the world, because everyone is running after patents. Whether your patent is effective or not, it provides an edge valued by industry and governments. But in design, none of the patents do anything. When it comes to the greater good, do those patents actually help? Such questions have not been answered properly.

Patents can be seen as a form of publication. So, let me ask about that more generally: what is the situation of design publications in India?

M.P. Ranjan: Publications! The situation in one simple word is … pathetic. Pathetic. There is no better word for it. I've written a lot on design publications in India. Look at the latest issue of Pool,[8] published last month: I wrote the forward on design publishing in India over the past 40 years and how it stands now. I have not used that word in that article, but I can tell you for the record that the status is pathetic. It can only get better when challenges are set, and when there are platforms that encourage both design schools and design practitioners to write more, share more, debate more and basically put themselves out there so that third parties can have their say.

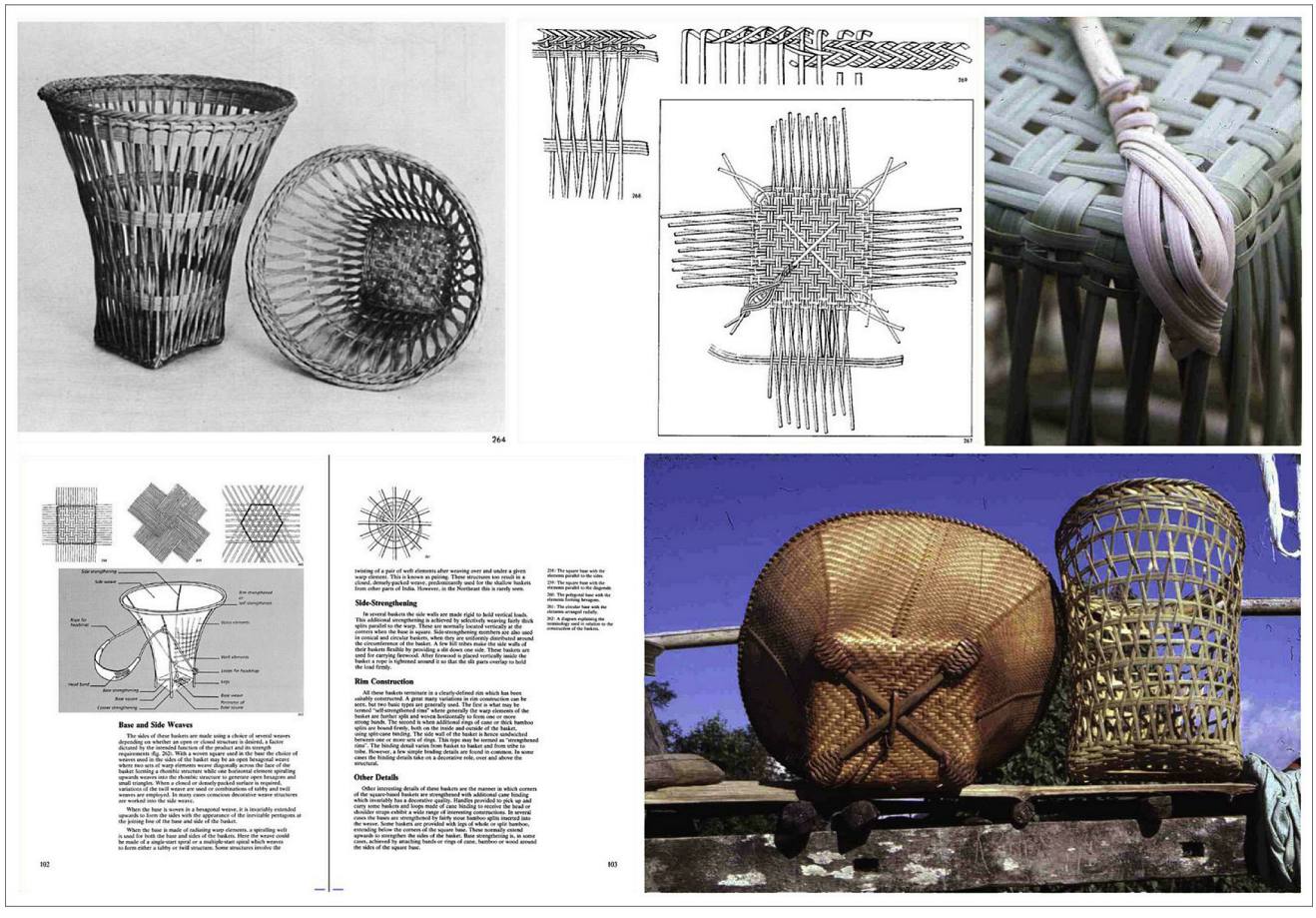


Figure 14 Images from the lecture "Three Orders of Design: Lessons from Northeast India" which illustrate examples from the book *Bamboo & Cane Crafts of Northeast India*. Copyright © 2009 M.P. Ranjan.

Ground level primary documentation is missing. The secondary level of reflecting on that documentation is missing. The tertiary level of philosophizing and building theory on the first two levels is missing. While there are thousands of design experiences, relatively few people have been through all the many kinds of experience. Design is happening – but there is very little published material that reflects on or shares the experience of design. Only very commercial types of design in corporate India are typically visible. Yet, there is a whole lot of design work happening in the non-corporate space, in the government space, in the non-government space, in the rural sector, and others. It is happening, but it is flying under the radar.

What do you see as the purpose of design publications?

M.P. Ranjan: There are many levels. They will build awareness and interest in design as a profession, and help design to connect with related disciplines. And they will also help change funding patterns, by changing the mindsets in government and business administration vis-à-vis design-related research. Design research is almost non-existent today. Some of us have been working in the field of design research for a fraction of the pay seen in fields of pure scientific research, both in terms of personal remuneration and in terms of facilities we have at our disposal.

At present, there is no platform for recognition. I say that because the Indian government does offer a number of national awards to filmmakers, scientists, artists, and people who contribute to social and economic initiatives, but not a single person in the country has been recognized for anything related to design. How is this possible, when I can list 10,000 things that can and have been done by design? This situation does not bode well for the future. If the opposite were true, we could put into place a better educational system, and attract talent into those institutions and so on. It would have a cascade effect. Both recognition and publication would change that.

Out of the thousands of people who have been trained in design, there are only 10–15 people who have contributed to design publications in this country over the past 50 years. This number has to change; it may change through the new PhD programs. But the problem with these new programs is that they are following the science pattern once again. There is a lot of confusion, because a lot of people talk about "design is science" or "design is art" – this needs to be debated. We need to get people to understand that design is not science, nor is it art.

So there is a huge scope for a university program in design that can actually change this situation. If the ordinary university programs in design do not create designers, they should at least create design critics. People who are articulating and expounding about design – and raising issues and arguing, to shed light on how the field of design could move forward.

How can we reflect on the issues we face today? For instance, who will take up the case of the bullet train and say whether it is the right thing for India or not? What else could the possibility entail? We leave it to a politician to design a dream, but that dream is only a wish, there are no details in it. When the multinational groups are consulted, they say "Look at Germany: do the same in India." Is that going to work? Can you imagine the self-driving Google car in Ahmedabad? I'm not challenging India's ability to do it, but look at our chaotic traffic conditions: there is a long way to go. So, is X the way forward, or is there another way? When considering advanced technology, intermediate technology, and appropriate technologies (these terms have all been used since the 70s, 80s and 90s) where should we go? How should we grow forward? We also need to understand the ethical parameters; we also need to change a whole host of laws and attitudes in society.

Where in India are there PhD programs in design?

M.P. Ranjan: There are Design PhD programs at IIT Bombay, Guwahati, Srishti, NID, CEPT and Ambedkar University. IIT Hyderabad is starting a massive PhD program. Other art colleges have also started to offer PhD programs. Yet because there have been no design schools offering a PhD until recently, designers that wanted to enter academics in a formal way were compelled to enter any old program: anthropology, sociology, technology and other PhD programs. They were trained to put their questions in a way that

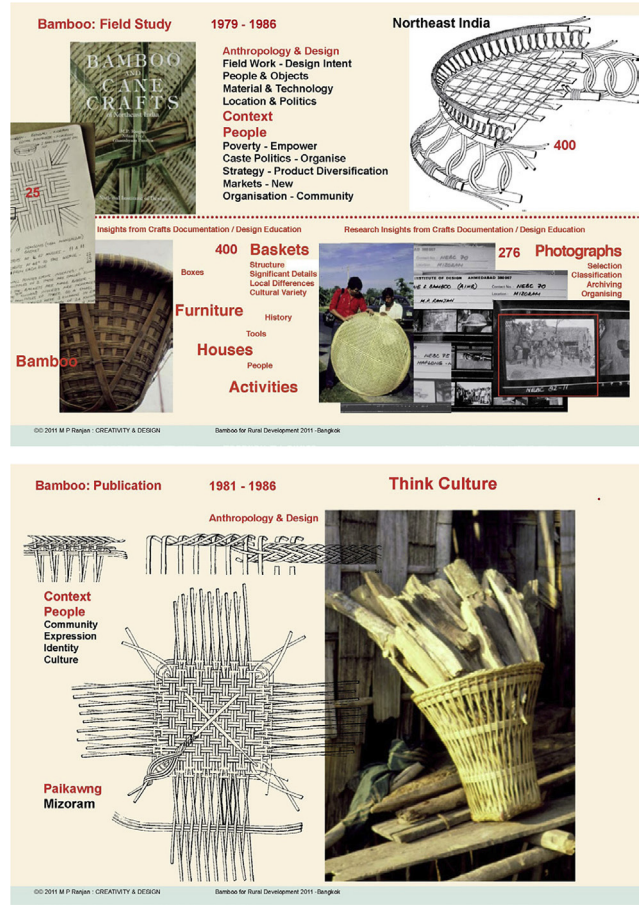


Figure 15 Images from *Bamboo & Design: Opportunity for NE India*. **Copyright © 2001 M.P. Ranjan.**

would fit into those programs, but these were design-related people whose intention was to come back to design. I don't think that was such a productive method. They may be qualified with a PhD but they haven't furthered the design agenda.

Someone has to do serious research on this. Another big design program is NIFT (National Institute of Fashion Technology). I helped to set up their Accessory Design program from 1993 to 1995. They have become the biggest school in the country for design, by virtue of their numbers. NIFT is government-owned and government-controlled. The campuses are of varying quality, as it has expanded very fast; some of them are terrible, but some have good people who are trying very hard. However, the climate that surrounds them is not favorable for design, in terms of their policy frameworks, etc. For instance, obtaining materials, determining the kind of studio exposure required, or time required to learn a certain activity, all of these are open to question: how long should one assume it takes to learn drawing? How long would you invest in that one activity?

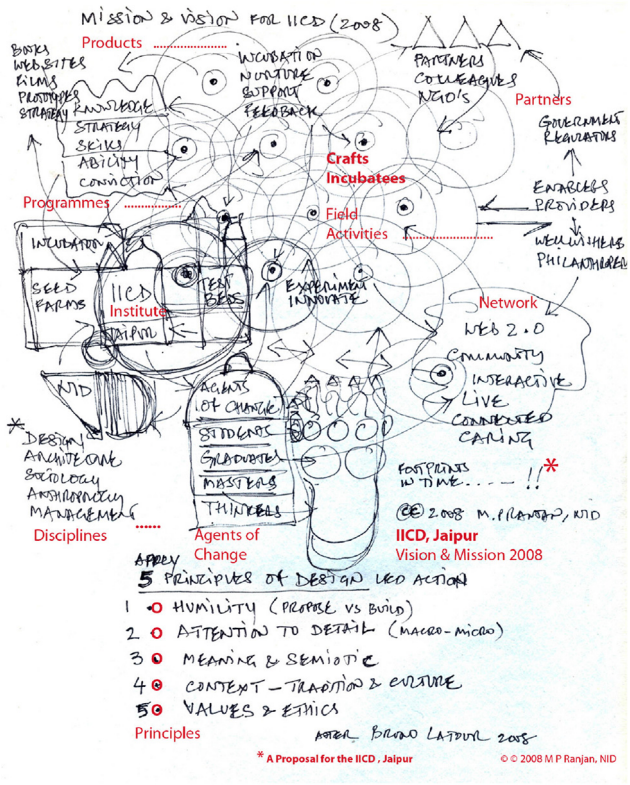


Figure 16 Systems model for the proposed Crafts Ecology for India as part of the IICD, Jaipur's Mission and Vision articulation in 2008. Copyright © 2008 M.P. Ranjan.

Is there a format for design publications that you think would make more sense?

M.P. Ranjan: Yes, I think making publications more accessible via web would be of much more service than print. But such publications should be authenticated and peer-reviewed so they have credibility. Cost is important as well. But if there is vision, even print publication can be made accessible. Every school in the country can get books, if the government decides to make it so. But locking things away in a library is not the answer. We need to make publications accessible and available to students. When I do my course, I try to put my students in touch with the thought leaders directly. I think that result is paying off. They might not be talking to the very best people in the world, but they are talking to some very credible people with some very compelling, personal, direct knowledge. But the only thing is, how to find such people?

Design faculty must be pathfinders and indexers. This is what I have tried to do: index people and say, what is the body of experience of a person like John Kolko? What can you hope to get from reading him, and which papers of his are good starting points? I feel that it is my responsibility: to make things accessible by advocacy, and connect students with ideas. Like, if I am reading Don Norman, which books of his should I read first? What aspects of his thought should I take on and study? And so on. I think the instructor's role is more like that. There is a long way to go.

I think good educational conferences would be a great platform for publication. We need small, archival conferences where domain specialists can meet together year after year to share across schools. The numbers could be small but the community needs to be large. We do have PhD Design (a discussion platform), but that is too diffuse, and not domain-specific. And where do basic design teachers go to talk to each other? Who has created a platform for teachers of undergraduate curricula to talk to each other? What about basic design teachers who are dealing with more advanced concepts? Where do they get together? Such platforms ought not to be left to chance. Platforms have to be moderated and grown collectively. These are challenges a university can address. Alongside core teaching activities, other cross-university events and activities should take place, and open sharing ethics should be a part of that.

One conference I attended, organized by the University of New South Wales (UNSW) in Sydney, was brilliant. Since the government of Australia has bilateral treaties with India, China, Malaysia, Japan, Vietnam and many of the Asian countries, the university had applied for grants from multiple countries. These grants were aimed at research projects in various fields, but collaborators in those countries were needed to be able to access the grants. Instead of all their people traveling to all these countries, which would have cost millions of dollars, UNSW created a clever strategy: their faculty selected 70 people, awarded us each with a travel stipend, and took care of our accommodation for 3–4 days in Sydney. So, for very limited costs, they were able to invite 70 people from design and design-related areas from a variety of Asian countries to meet the entire UNSW faculty. Each of us gave a presentation, with breakout sessions. At the end of the sessions, they gave us all a fellowship, which fast-tracked access to research collaborations between our institutions and theirs. A lot of different projects and activities have emerged from that conference, because people were able to actually meet, so the platform and channels were set up efficiently. I thought it was a brilliant move. So for a limited amount of money, the gains they achieved were enormous.

I think we need to think about these kinds of strategies. This is just a particular example of how we could carry out collaborative research. So, for the same amount of money it would cost to appoint four

professors, UNSW was able to pay 200 international collaborators. Instead of being an elephant, you can be an ant, and nibble away at these things! Many people don't need money; they need an enabling environment, they need facilitation and they need to be encouraged to move forward. And then eventually, they need a platform to showcase it, which can be done via the web, easily.

We have been fighting in a space with very limited money. And we have had to be more inventive about getting ahead.

Do you have any further advice for me?

M.P. Ranjan: Your map of design is a worthwhile task. To this end, there are many design summits on record, so you can find out the topics, and learn about the speakers and what they do. You might also consult the journalists who have been covering design. For instance, the *Economic Times* ran the Design Summit this year in Bombay. Similarly, *Mint* is a Bombay journal that has been writing about design. Finally, there have been some large individual promoters – large families and industrialists – who have started investing in design because their family members were trained in design. Many of the younger generation sees design as a way forward, and I think this is going to change business in our country. At Godrej [a large industrial house] for instance, each of the owner family members has a foot in design. One went to IIT Chicago and then came back to build design at Godrej, focusing on developing new products for the bottom of the pyramid market. They have been bringing in IITC professors as their consultants. Godrej is a multi-vertical company, so they can go anywhere in the planet and get people, but I'm not aware of any design school in India that is connecting with them. Similarly, in the Fisher group [a large retail chain], the younger generation is all connected to design. So that is good news for design in the country. But it happens because there are pressures from the outside pushing these companies into design. An example is the new design thinking platform for Infosys, who have announced that they have trained 70,000 engineers in design thinking. Indian industry is under tremendous pressure to put design into their products, because global competition is heating up.

Thank you so much for this interview. I will have to thank Don Norman for introducing us.

M.P. Ranjan: He is an amazing chap. I think that what Don Norman is doing with The Design Lab is an amazing thing. He is trying to get into a technological university and look at design as a big question, a really big question – and then try to evolve a new strategy and methodology for design, design thinking and design education. For him to be able to validate his work and be rigorous is a big challenge. I first met Don in 1995 at Apple, with my student who had won an award from Apple. And at that time, I gifted him my bamboo book. He gave me a signed copy of *The Psychology of Everyday Things*. We've met a few times since then and have been in conversation on the PhD Design list.

It looks like we are out of time, but I should mention that I am hosting a game design workshop on campus tomorrow.

M.P. Ranjan: Ah, I can't come. I'm totally tied up. I'm in the process of shifting house, so it means I am busy packing things and organizing my books. There are thousands of books lying at home, some of which we have to get rid of. We've been on campus for 15 years now and this is the first time we are moving out after

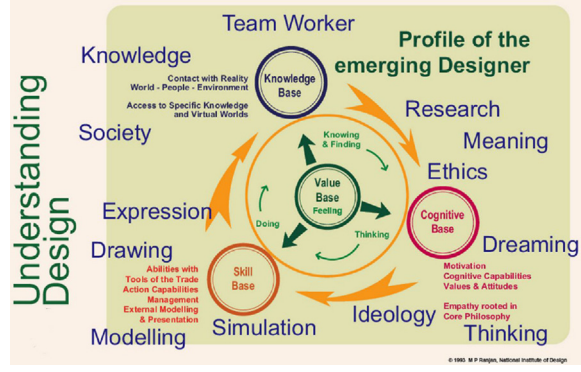


Figure 17a Profile of the emerging designer and those who will adopt design as a way forward in their own professions. Copyright © 2007 M.P. Ranjan.

Figure 17b Title page of the visual presentation titled "Hand-Head-Heart: Ethics in Design." Copyright © 2009 M.P. Ranjan.

Figure 18 Davos: World Economic Forum, January 2001: Photo credit: https://www.facebook.com/IndiaFutureofChange/?fref=photo. The panelists and the organizers of the first INDIA Future of Change session on Design, Innovation and Entrepreneurship in India at Davos. From left to right: Sudhir John Horo, Tim Brown, Paola Antonelli, K. R. Sridhar, Amit Shahi, Wilfried Aulbur, S.D. Shibulal, M.P. Ranjan, Bill Rusitzky.

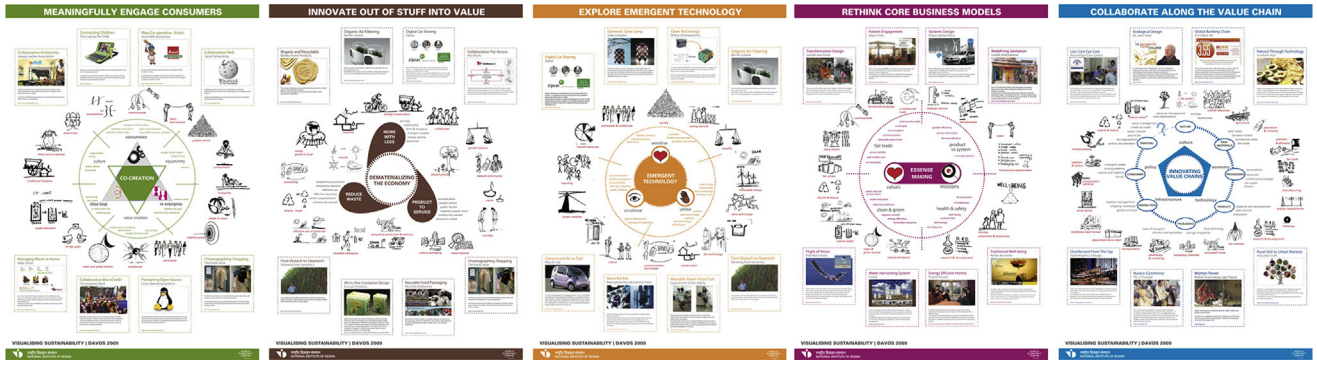


Figure 19 Five posters on "visualizing sustainability" that were discussed at Davos at a special session on Sustainability on 29 January 2009. Copyright © 2009 M.P. Ranjan.

a long time. I call it moving from the frying pan into the fire! So that is tomorrow. I've been at NID since 1969! That's a good 45 years, so there are a lot of stories to be told.

I am working on a blog to build reflective stories[9] and to reflect on other people's work. Yesterday I wrote a piece on an NID faculty member who set up a very lovely design assignment. She wanted to teach students that if you take a picture of a world leader, you don't just take a picture of their head, you take a picture in context. So, she asked students to follow faculty around to photograph them in context. So I had one student following me for 15 days!

It was a wonderful assignment. But teachers who assign these wonderful assignments have no record of how to extol the virtues of the assignment and why and how it should be done, what are the qualities that come out of it, and what is the sense of learning that comes out of it. If we did have a platform like that, there were 10,000 assignments at NID over the past 30 years – in composition, photography, typography, material studies, in every field – that might have been written about. There are so many great projects that have not been reflected upon. If a design school

Figure 20 Modeling village aspirations and development opportunities for use by local population as well as planners. Village Sahpur study proposal: A student project. Copyright © 2007 M.P. Ranjan.

Figure 21 M.P. Ranjan likes selfies. He used to immediately forward people in context to the discussion topic or the event. Figure 21a is from one of his favorite groups—"Design for Change" Jury 2014. Courtesy of Kiran Bir Sethi. Figure 21b is from one of his last selfies: an extended late evening chat on 24th July 2015 at NID. Courtesy of Praveen Nahar.

Figure 22 M.P. Ranjan. Courtesy of Praveen Nahar.

doesn't document and disseminate what they are doing, they are missing huge opportunities!

So, this is why I believe now that future design schools will have to look at entrepreneurship. That way, whatever they develop as part of their journey of learning can actually go into society. So, the student who produces something *can* become an entrepreneur…or partner with an entrepreneur…and move beyond. (See figs. 18 and 19.)

Conclusion

M.P. Ranjan influenced thousands of students during his years as faculty (figs. 20–22). He was beloved, as can be seen by the outpouring of online support following his death. What can be taken from this particular interview?

First, design in India is increasingly recognized, but there is a long way to go. Design lacks recognition in two places where it could have massive impact: within standard engineering curricula and within the government. His definitional distinction between design and engineering is outstanding. His advocacy for a national design award is important to note, as this has the potential to increase the recognition of the value of design in India.

Second, the issues of design publishing are not unique to India – and they must be addressed. Ranjan's suggestions for documenting and reflecting upon design assignments and projects should be taken seriously. Similarly, the small conference publication format he recommends is an intriguing model, both for improving design publication but also pedagogy. His idea that effective design instructors must be able to network their students and connect them to thought leaders is both valuable and unusual.

Third, his identification of design attitudes and abilities is a simple yet powerful way of classifying the knowledge that is intrinsic to design across different design verticals. His advocacy for a strong integration between practical project knowledge and general design theory is critical to the success of an independent discipline of design. His rejection of "design as science" appears based on his recognition that playfulness is an essential method of design; his rejection of "design as art" appears based on the idea that design must be useful.

M.P. Ranjan's creative viewpoints have primarily inspired designers in India, yet they are truly global in scope. After all, the institutional role of design as a field is far from determined anywhere; similarly, the

lack of publications dedicated to design is not unique to India. So, by documenting some of his last words in a new and ambitious design publication, both the man and his body of written work can help guide and inspire future designers.

Acknowledgments

Much appreciation goes to M.P. Ranjan, his wife Aditi Ranjan and NID. Thank you to Don Norman for connecting me to M.P. Ranjan!

1 IDC and IIT Bombay, "Design as a Strategy for a Developing Economy," National Design Committee, 1989, accessed October 26, 2015, http://www.idc.iitb.ac.in/resources/reports/desing-as-a-strategy-developing-economy.pdf; Tim Brown and Jocelyn Wyatt, "Design Thinking for Social Innovation," *Development Outreach* 12, no. 1 (2010): 29.

2 Aditi Ranjan and M.P. Ranjan, eds., *Handmade in India: A Geographic Encyclopedia of Indian Handicrafts* (New York: Abbeville Press, 2009); Aditi Ranjan and M.P. Ranjan, eds., *Handmade in India: Crafts of India* (New Delhi: Council of Handicraft Development Corporations (COHANDS), 2007).

3 M.P. Ranjan, Nilam Iyer, and Ghanshyam Pandya, *Bamboo and Cane Crafts of Northeast India* (Ahmedabad: National Institute of Design, 1986).

4 M.P. Ranjan, "Course Outline: Design Thinking (2015)," *Academia.edu*, accessed October 26, 2015, https://www.academia.edu/13596219/University_wide_course_on_Design_Thinking.

5 The website of National Institute of Design, accessed December 13, 2015, http://www.nid.edu.

6 Terry Irwin, "Transition Design: A Proposal for a New Area of Design Practice, Study, and Research," *Design and Culture* 7, no. 2 (April 2015): 229.

7 IDC at IIT Bombay, "Design Manifesto: For a Design Enabled Technical Education," January 15, 2014, accessed October 26, 2015, http://design.iith.ac.in/pdfs/DesignManifesto.pdf.

8 M.P. Ranjan, "Reflections on Design Publishing in India," *POOL Annual 2* (June 2015), accessed October 26, 2015, http://www.indipool.com/product/pool-annual-2/.

9 M. P. Ranjan, *Design for India* (blog), http://design-for-india.blogspot.in. Unfortunately, this final post remains unpublished.